

A network switch port includes a port filter configured to receive at least a portion of a data frame including layer 3 information and to generate a tag result. A queue block is configured for transferring the data frame to a buffer memory. A switch fabric is configured for receiving the tag result and for performing a frame forwarding switching decision based on the tag result and monitoring of the transfer of the data frame. A synchronizing device is configured to synchronize the transfer of a valid tag result to the switch fabric with the transfer of the at least a portion of the data frame to the buffer memory based on a signal from the queue indicating a status of the transfer of the portion of the data frame to the buffer memory.

ABSTRACT OF THE DISCLOSURE